

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:

Kamen, et al.

Attorney Docket:

1062/D67

Serial No:

10/617,608

Art Group Unit:

N/A

Date Filed:

July 11, 2003

Examiner Name:

N/A

Invention:

Motion Control of a Transporter

LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT

Ref. No.	U.S. Patent No.	Inventor	Issue Date	See Sec. 1	Exam. Init.
AA	584,127	Draullette et al.	June 8, 1897		M.L.
AB	849,270	Schafer et al.	Apr. 2, 1907		i
AC	1,739,716	Fisher	Dec. 17, 1929		
AD	2,742,973	Johannesen, H.	Apr. 24, 1956		
AE	3,145,797	Taylor	Aug. 25, 1964		
AF	3,260,324	Suarez	July 12, 1966		
AG	3,283,398	Andren	Nov. 8, 1966		
AH	3,374,845	Selwyn, D.	Mar. 26, 1968		
AI	3,399,742	Malick	Sept. 3, 1968	*	
AJ	3,446,304	Alimanestiano	May 1969		
AK	3,450,219	Fleming, J.	June 17, 1969		
AL	3,515,401	Gross, E.	June 2, 1970		
AM	3,580,344	Floyd	May 25, 1971		
AN	3,596,298	Durst, Jr.	Aug. 3, 1971		
AO	3,724,874	Simpson	Apr. 1973		
AP	3,860,264	Douglas et al.	Jan. 14, 195		
AQ	3,872,945	Hickman et al.	Mar. 25, 1975	•	1

(Information Disclosure Statement--page 4 of 16)

Best Available Copy

Ref. No.	U.S. Patent No.	Inventor	Issue Date	See Sec. 1	Exam. Init.
AR	3,952,822	Udden et al.	Apr. 27, 1976		An. ()
AS			<u></u>		My.
	3,967,862	Hunter et al.	July 1976		
AT	4,018,440	Deutsch	Apr. 19, 1977		
AU	4,062,558	Wasserman	Dec. 13, 1977		
AV	4,076,270	Winchell	Feb. 28, 1978		
AW	4,088,199	Trautwein	May 9, 1978		
AX	4,094,372	Notter	June 13, 1978		
AY	4,109,741	Gabriel	Aug. 29, 1978	,	
AZ	4,111,445	Haibeck	Sept. 5, 1978		
BA	4,151,892	Francken	May 1, 1979	*	
BB	4,222,449	Feliz	Sept. 16, 1980		
BC	4,264,082	Fouchey, Jr.	Apr. 28, 1981		
BD	4,266,627	Lauber	May 12, 1981		
BE	4,293,052	Daswick et al.	Oct. 6, 1981		
BF	4,325,565	Winchell	Apr. 20, 1982		
BG	4,354,569	Eichholz	Oct. 19, 1982		
ВН	4,363,493	Veneklasen	Dec, 14, 1982		
BI	4,373,600	Buschbom et al.	Feb. 15, 1983		
BJ	4,375,840	Campbell	Mar. 8, 1983		
BK	4,510,956	King	Apr. 16, 1985		
BL	4,560,022	Kassai	Dec. 24, 1985		
BM	4,566,707	Nitzberg	Jan. 28, 1986		
BN	4,570,078	Yashima et al.	Feb. 11, 1986		
ВО	4,571,844	Komasaku et al.	Feb. 25, 1986		·
BP	4,624,469	Bourne, Jr.	Nov. 25, 1986		
BQ	4,645,230	Hammons	Feb. 1987		
BR	4,657,272	Davenport	Apr. 14, 1987		4

Ref. No.	U.S. Patent No.	Inventor	Issue Date	See Sec. 1	Exam. Init.
BS	4,685,693	Vadjunec	Aug. 11, 1987		11/
BT	4,709,772	Brunet	Dec. 1, 1987		7
BU	4,716,980	Butler	Jan. 5, 1988		
BV	4,740,001	Torleumke	Apr. 26, 1988		
BW	4,746,132	Eagan	May 24, 1988		
BX	4,770,410	Brown	Sept. 13, 1988		
BY	4,786,069	Tang	Nov. 22, 1988		
BZ	4,790,400	Sheeter	Dec. 13, 1988		
CA	4,790,548	Decelles et al.	Dec. 13, 1988		
СВ	4,794,999	Hester	Jan. 3, 1989		
CC	4,798,255	Wu	Jan. 17, 1989		
CD	4,802,542	Houston et al.	Feb. 7, 1989		
CE	4,809,804	Houston et al.	Mar. 7, 1989		
CF .	4,834,200	Kajita	May 30, 1989		:
CG	4,863,182	Chern	Sept. 5, 1989		
CH	4,867,188	Reid	Sept. 19, 1989		
CI	4,869,279	Hedges	Sept. 26, 1989		
CJ	4,874,055	Beer	Oct. 17, 1989		
CK	4,890,853	Olson	Jan. 2, 1990		
CL	4,919,225	Sturges	Apr. 24, 1990		
CM	4,953,851	Sherlock et al.	Sept. 4, 1990	7	
CN	4,984,754	Yarrington	Jan. 15, 1991	,	
со	4,985,947	Ethridge	Jan. 22, 1991		
CP	4,998,596	Miksitz	Mar. 12, 1991		
CQ	5,002,295	Lin	Mar. 26, 1991		
CR	5,011,170	Forbes et al.	Apr. 1991		

(Information Disclosure Statement--page 6 of 16)

Ref. No.	U.S. Patent No.	Inventor	Issue Date	See Sec. 1	Exam. Init.
			4 00 1001		
CS	5,011,171	Cook	Apr. 30, 1991		M.J.
СТ	5,052,237	Reimann	Oct. 1, 1991		7
CU	5,064,209	Kurschat	Nov. 1991		
CV	5,111,899	Reimann	May 12, 1992		:
CW	5,158,493	Morgrey	Oct. 27, 1992		
CX	5,161,820	Vollmer	Nov. 10, 1992		
CY	5,168,947	Rodenborn	Dec. 8, 1992		
CZ	5,171,173	Henderson et al.	Dec. 15, 1992		
DA	5,186,270	West	Feb. 16, 1993		
DB	5,221,883	Takenaka et al.	June 22, 1993		
DC	5,240,266	Kelley et al.	Aug. 1993		
DD	5,241,875	Kochanneck	Sept. 7, 1993		
DE	5,248,007	Watkins et al.	Sep. 28, 1993		
DF	5,314,034	Chittal	May 24, 1994		
DG	5,350,033	Kraft	Sept. 27, 1994		
DH	5,366,036	Perry	Nov. 22, 1994		
DI	5,376,868	Toyoda et al.	Dec. 27, 1994		
DJ	5,419,624	Adler et al.	May 30, 1995		
DK	5,641,173	Cobb	Jun. 1997		
DL	5,655,615	Mick	Aug. 1997		
DM	5,701,965	Kamen et al.	Dec. 30, 1997		
DN	5,701,968	Wright-Ott et al.	Dec. 1997		
DO	5,718,534	Neuling	Feb. 1998		
DP	5,775,452	Patmont	July 1998		
DQ	5,791,425	Kamen et al.	Aug. 11, 1998	*	
DR	5,794,730	Kamen	Aug. 18, 1998	*	V

(Information Disclosure Statement--page 7 of 16)

Ref. No.	U.S. Patent No.	Inventor	Issue Date	See Sec. 1	Exam. Init.
DS	5,873,582	Kaufman et al	Feb.1999		A.P.
DT	5,921,844	Hollick	Jul. 1999		1
DU	5,947,505	Martin	Sep.7, 1999		
DV	5,971,091	Kamen et al.	Oct. 26, 1999	*	
DW	5,973,463	Okuda et al.	Oct. 26, 1999		
DX	5,975,225	Kamen et al.	Nov. 2, 1999	*	
DY	5,986,221	Stanley	Nov. 16, 1999		
DZ	6,003,624	Jorgensen et al.	Dec. 21, 1999	*	
EA	6,039,142	Eckstein et al.	Mar. 21, 2000		
EB ·	6,050,357	Staelin et al.	Apr. 18, 2000	*	
EC	6,059,062	Staelin et al.	May 9, 2000	*	
ED	6,125,957	Kauffmann	Oct 2000		
EE	6,131,057	Tamaki et al.	Oct. 10, 2000		
EF	6,223,104	Kamen et al.	Apr. 24, 2001		
EG	6,223,114	Boros et al.	Apr. 24, 2001	* .	
EH	6,225,977	Li	May 1, 2001		
EI	6,288,505	Heinzmann et al.	Sep. 11, 2001	*	
EJ	6,302,230	Kamen et al.	Oct. 16, 2001	*	
EK	US 2002/06300 6 A1	Amesbury Burl et al	30 May 2002		

Ref	Foreign Patent No.	Applicant	Publication Date	See Sec.	Exam. Init.
No.	DE 2 049 502	Dana Davidanment	Mov. 6, 1071	1	01/
EL	DE 2 048 593	Deres Development	May 6, 1971		11.1.
EM	DE 298 08 091	Brecht	Oct. 10,		Y
	U1	D 1.	1998		
EN	DE 298 08 096 U1	Brecht	Oct. 8, 1998		
EO	DE 31 28 112 A1	Heid	Feb. 3, 1983		
EP	DE 32 42 880 A1	Toselli	June 23, 1983		
EQ	DE 3411489 A1	Takamiya et al.	Oct. 10, 1984		
ER	DE 44 04 594 A	Wittelsberger (and translation)	Aug. 17, 1995		
ES	DE 196 25 498 C	Eckstein, et al.	Nov. 20, 1997	-	
ET	EP 0 193 473	Brunet	Sept. 3, 1986		
EU	EP 0 537 698 A1	Toselli	Apr. 21, 1993		
EV	EP 0 109 927	von Rohr	July 4, 1984		
EW	EP 0 958 978 A2	Ghoneim et al	Nov. 24, 1999		
EX	FR 2 502 090	Tobex	Sept. 24, 1982		
EY	FR 980 237	Pages	May 9, 1951		
EZ	GB 2 139 576 A	Colpus	Nov. 14, 1984		
FA	GB 2 358 163 A	Ranson	Jan. 12, 2000	*	
FB	JP 59-73372		Apr. 25, 1984		
FC	JP 61-31685		Feb. 26, 1986		
FD	JP 4-201793	Furukawa (with translation)	July 22, 1992	*	
FE	JP 2-190277	Toyoda (translation)	July 26, 1990		1

(Information Disclosure Statement--page 9 of 16)

Ref	Foreign Patent No.	Applicant	Publication Date	See Sec.	Exam. Init.
No.		<u> </u>		1	
FF	JP 5-213240	Mitsubishi (translation)	Aug. 24, 1993		M.L.
FG	JP 0255580	Takahashi (with abstract)	Dec. 17, 1985		V
FH	JP 7255780	·	Mar. 1995		•
· Fl	JP 57-87766	Iguchi (with abstract)	June 1982		
FJ	JP 52-44933	Shimizu (with abstract)	Oct. 1975		
FK	JP 63-305082	Santo (with abstract and translation)	Dec. 1988		
FL	JP 62-12810	Hitachi	July 10, 1985		
FM	JP 57-110569		7 Sep. 1982		
FN	JP 6-171562	Takeda	Dec. 10, 1992		
FO	JP 6-105415	Suzuki	December 21, 1994	*	
FP	.UK 152,664	Garanzini	Feb. 16, 1922		
FQ	UK 1213930	Fleming	Nov. 25, 1970		
FR	WO 86/05752	Post	Oct. 9, 1986		
FS	WO 89/06117	Rix (with translation)	July 13, 1989	*	
FT	WO 96/23478	Kamen et al.	Aug. 8, 1996		
FU	WO 98/46474	Staelin et al.	Oct. 22, 1998		
FV	WO 00/73101	Deka Products LP	7 Dec. 2000	*	
FW	WO 00 75001	Deka Products LP	14 Dec. 2000 (2000- 12-14) Claim 23		
FX	0663 313	Fujii et al.	July 19, 1995	*	1

(Information Disclosure Statement--page 10 of 16)

Ref.	Non-Patent	See	Exam
No.	References	Sec. 1	Init.
FY .	Kawaji, S., Stabilization of Unicycle Using Spinning Motion, Denki Gakkai Ronbushi, D, Vol. 107, Issue 1, Japan (1987), pp. 1-22		M.L.
FZ	Schoonwinkel, A., Design and Test of a Computer- Stabilized Unicycle, Stanford University (1988), UMI Dissertation Services		Ĭ
GA	Vos, D., Dynamics and Nonlinear Adaptive Control of an Autonomous Unicycle, Massachusetts Institute of Technology, 1989		
GB	Vos, D., Nonlinear Control of an Autonomous Unicycle Robot: Practical Isues, Massachusetts Institute of Technology, 1992		
GC	Koyanagi et al., A Wheeled Inverse Pendulum Type Self-Contained Mobile Robot and its Posture Control and Vehicle Control, The Society of Instrument and Control Engineers, Special issue of the 31 st SICE Annual Conference, Japan 1992, pp. 13-16.		
GD	Koyanagi et al., A Wheeled Inverse Pendulum Type Self-Contained Mobile Robot, The Society of Instrument and Control Engineers, Special issue of the 31 st SICE Annual Conference, Japan 1992, pp. 51-56		
GE	Koyanagi et al., A Wheeled Inverse Pendulum Type Self-Contained Mobile Robot and its Two Dimensional Trajectory Control, Proceeding of the Second International Symposium on Measurement and Control in Robotics, Japan 1992, pp. 891-898.		
GF	Watson Industries, Inc., Vertical Reference Manual ADS-C132-1A, 1992, pp. 3-4		
GG ·	News article Amazing Wheelchair Goes Up and Down Stairs		
GH	Osaka et al., Stabilization of unicycle, Systems and Control, Vol. 25, No. 3, Japan 1981, pp. 159-166 (Abstract Only)		
GI	Roy et al., Five-Wheel Unicycle System, Medical & Biological Engineering & Computing, Vol. 23, No. 6, United Kingdom 1985, pp. 593-596		

Ref.	Non-Patent	See	Exam
No.	References	Sec. 1	Init.
GJ	Kawaji, S., Stabilization of Unicycle Using Spinning Motion, Denki Gakkai Ronbushi, D, Vol. 107, Issue 1, Japan 1987, pp. 21-28 (Abstract Only)		n. f.
GK	Schoonwinkel, A., Design and Test of a Computer- Stabilized Unicycle, Dissertation Abstracts International, Vol. 49/03-B, Stanford University 1988, pp. 890-1294 (Abstract only)		
GL.	Vos et al., Dynamics and Nonlinear Adaptive Control of an Autonomous Unicycle - Theory and Experiment, American Institute of Aeronautics and Astronautics, A90-26772 10-39, Washington, D.C. 1990, pp. 487-494 (Abstract only)		
GM	TECKNICO'S Home Page, Those Amazing Flying Machines, http://www.swiftsite.com/technico		
GN	Stew's Hovercraft Page, http://www.stewcam.com/hovercraft.html		
GO	Kanoh, Adaptive Control of Inverted Pendulum, Computrol, vol. 2, (1983), pp. 69-75.		
GP	Yamafuji, A Proposal for Modular-Structured Mobile Robots for Work that Principally Involve a Vehicle with Two Parallel Wheels, Automation Technology, vol. 20, pp. 113-118 (1988).		
GQ	Yamafuji & Kawamura, Study of Postural and Driving Control of Coaxial Bicycle, Paper Read at Meeting of Japan Society of Mechanical Engineering (Series C), vol. 54, no. 501, (May, 1988), pp. 1114-21		
GR	Yamafuji et al., Synchronous Steering Control of a Parallel Bicycle, Paper Read at Meeting of Japan Society of Mechanical Engineering (Series C), vol. 55, no. 513, (May, 1989), pp. 1229-34.		
GS	Momoi & Yamafuji, Motion Control of the Parallel Bicycle-Type Mobile Robot Composed of a Triple Inverted Pendulum, Paper Read at Meeting of Japan Society of Mechanical Engineering (Series C), vol. 57, no. 541, (Sep., 1991), pp. 154-159		\

Ref. No.	Non-Patent References	See Sec. 1	Exam Init.
GT	Popular Science, November 2002, pp. 52-53 a copy off of "http://www.popsci/auto/article/0,12543,384518-2,00.html.	*	M.J.
GU	Umea Institute of Design Degree Show 2002, Car Design News, http://www,cardesugbbews,cin/features/2002/02080 4umea-show/	*.	
GV	International Search Report of November 7, 2003	*	1

Examiner Signature:

Date Considered:

(Information Disclosure Statement--page 13 of 16)

SECTION 2. FORMS PTO/SB/08A and 08B (formerly Form PTO-1449)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:

Kamen et al.

Attorney Docket:

1062/D67

Serial No:

10/617,608

Art Group Unit:

3611

Date Filed:

July 11, 2003

Examiner Name:

Luby, M.

Invention:

Motion Control of a Transporter

125/04

LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

U.S. PATENT DOCUMENTS							
Examiner Initials							
M.P	GW	US2004/0055796 A1	Mar. 25, 2004	Kamen et al.	180/21		

Examiner Signature:

Date Considered:

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation *if not* in conformance and not considered. Include copy of this form with next communication to applicant.